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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/708,451

03/04/2004

Bruce B. Doris

FIS920040022US1

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7590

04/24/2006

EXAMINER

NGUYEN, TUAN H

INTERNATIONAL BUSINESS MACHINES CORPORATION

DEPT. 18G

BLDG. 300-482

2070 ROUTE 52

HOPEWELL JUNCTION, NY 12533

ART UNIT

PAPER NUMBER

2813

DATE MAILED: 04/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

14

Office Action Summary	Application No.		Applicant(s)	
	10/708,451		DORIS ET AL.	
	Examiner		Art Unit	
	Tuan H. Nguyen		2813	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 February 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 11-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 11-20 is/are allowed.
- 6) ☒ Claim(s) 1-3 and 21-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 23, 24, 26, 27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 23, it is unclear as to where "the standoff structure" comes from, "the standoff structure" lacks antecedent basis.

In claims 24, 26, 27, it is unclear as to how a (single) transistor could have multiple gate structures atop and beneath of the planar platform.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 21-22, 24-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Chan et al..

Chan et al., figs. 1A-2Z and text in paragraphs [0035]-[0051] teach the claimed method for forming a transistor including the steps of disposing a planar platform 5 of silicon atop a support structure 3 of oxide which is atop a substrate 4, the support structure 3 is disposed beneath the planar platform (fig. 2F); forming gate structures 12

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both atop and beneath the planar platform 5 (figs. 1A); and forming source and drain diffusions 9 within the planar platform 5.

With respect to claims 2-3, figs. 1A shows the gate structure 12 which is formed beneath the planar platform 5 are smaller the planar platform 5 and are aligned with the gate structures which are formed atop the planar platform 5.

With respect to claim 21, fig. 1A shows the platform of silicon 5 is supported from below by the support structure 3.

With respect to claim 22, since the claimed does not specify the width of the support structure, therefore the support structure 3 that has the width larger than the platform 5 from Chan et al. reference is considered being centered under platform 5.

With respect to claim 25, fig. 2U shows the underside of the planar platform that is exposed approximately 80% before forming the gate structures in the subsequent step.

With respect to claims 26-27, figs. 1A shows the gate structure 12 formed beneath the planar platform is smaller than the planar platform and aligned with the gate structure formed atop the planar platform.

Allowable Subject Matter

Claims 11-20 are allowed.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Response to Arguments

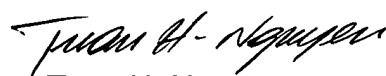
Applicant's arguments filed 2/16/06 have been fully considered but they are not persuasive. Contrary the Applicant's argument in his Remarks, page 9, second paragraph that "Chan's SOI layer 5 is supported at both side edges, which are not exposed. The SOI layer 106' of the invention is supported in the middle, which means

that its side edges are exposed – see FIG. 11.” in fact, the instant claims do not recite the SOI of the present invention is supported in the middle, its side edges are exposed, and preclude the side edges of the SOI layer 5 in Chan from not exposed. Note that the SOI layer 5 from Chan is supported by the support structure 3 disposed hereunder.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan H. Nguyen whose telephone number is 571-272-1694. The examiner can normally be reached on 9AM-5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl Whitehead Jr. can be reached on 571-272-1702. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Tuan H. Nguyen
Primary Examiner
Art Unit 2813